

AMENDMENTS TO THE CLAIMS

1. (Canceled).

2. (Canceled).

3. (Canceled).

4. (Previously Presented) A dielectrophoretic (DEP) cell in which particles can be characterized, manipulated and separated comprising an array of elongated electrodes, and means to apply at least one electrical signal to the electrodes, in which each electrode has a notional central axis along its direction of elongation, each electrode has one or more deflections from the notional central axis, and the electrodes in the array being in register, wherein the electrodes are serpentine in shape, and wherein the electrodes are half sinusoidal in shape.

5. (Previously Presented) A dielectrophoretic (DEP) cell in which particles can be characterized, manipulated and separated comprising an array of elongated electrodes, and means to apply at least one electrical signal to the electrodes, in which each electrode has a notional central axis along its direction of elongation, each electrode has one or more deflections from the notional central axis, and the electrodes in the array being in register, wherein the

electrodes are serpentine in shape, and wherein the electrodes are of elongated "C" shape.

6. (Previously Presented) A dielectrophoretic (DEP) cell in which particles can be characterized, manipulated and separated comprising an array of elongated electrodes, and means to apply at least one electrical signal to the electrodes, in which each electrode has a notional central axis along its direction of elongation, each electrode has one or more deflections from the notional central axis, and the electrodes in the array being in register, wherein the electrodes are serpentine in shape, and wherein the electrodes are single half sinusoids connected between straight side arms.

7. (Canceled).

8. (Canceled).

9. (Canceled).

10. (Canceled).

11. (Canceled).

12. (Canceled).

13. (Previously Presented) A dielectrophoretic (DEP) cell in which particles can be characterized, manipulated and separated comprising an array of elongated electrodes, and means to apply at least one electrical signal to the

electrodes, in which each electrode has a notional central axis along its direction of elongation, each electrode has one or more deflections from the notional central axis, and the electrodes in the array being in register, wherein positions of maximum curvature of each electrode are arranged in non-linear alignment, wherein the positions of maximum curvature of each electrode are arranged along a curve, and wherein the electrodes are serpentine and each electrode comprises two sinusoids, and positions of maximum curvature of the sinusoids are arranged along divergent curves.

14. (Previously Presented) A dielectrophoretic (DEP) cell in which particles can be characterized, manipulated and separated comprising an array of elongated electrodes, and means to apply at least one electrical signal to the electrodes, in which each electrode has a notional central axis along its direction of elongation, each electrode has one or more deflections from the notional central axis, and the electrodes in the array being in register, wherein the DEP cell comprises a first central array of sinusoidal or half sinusoidal electrodes, the axes of the electrodes of the first central array being straight and parallel, and a second outer array of sinusoidal or half sinusoidal

electrodes, the axes of the electrodes of the second outer array being in the form of nested "U" shapes, there being provided means to apply electrical signals of different phases independently to the first and second arrays.

15. (Canceled).

16. (Previously Presented) A dielectrophoretic (DEP) cell in which particles can be characterized, manipulated and separated comprising an array of elongated electrodes, and means to apply at least one electrical signal to the electrodes, in which each electrode has a notional central axis along its direction of elongation, each electrode has one or more deflections from the notional central axis, and the electrodes in the array being in register, and in which the electrodes are arranged in pairs with inter-electrode spacing being substantially greater than inter-pair spacing.

17. (Canceled).

18. (Canceled).

19. (Canceled).

20. (Canceled).

21. (Canceled).

22. (Canceled).

23. (Canceled).

24. (Canceled).

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- 25. (Canceled) .
- 26. (Canceled) .
- 27. (Canceled) .
- 28. (Canceled) .
- 29. (Canceled) .
- 30. (Canceled) .
- 31. (Canceled) .
- 32. (Canceled) .
- 33. (Canceled) .
- 34. (Canceled) .
- 35. (Canceled) .